

## **IN THE CLAIMS:**

1.- 7. (Canceled)

8. (Previously presented) A data receiving apparatus for automatically scheduling the recording of broadcast programs without user intervention in the scheduling process, comprising:

reservation accepting means for accepting reservation requests of one or more data broadcast programs that are sequentially and repetitively transmitted in groups over ones of multiple channels such that programs in different channels can overlap each other in time,

a reception and storing means for recording one data broadcast program at a time, grouping means for grouping the reserved data broadcast programs into one or more groups in which each group contains programs that interfere with each other with respect to recording by the reception and recording means,

priority assigning means for assigning a unique recording priority to each group and to each program within a group such that all of the reserved repeating programs can be recorded in sequence according to the assigned priorities.

9. (Previously presented) The apparatus of claim 8 further comprising means responsive to a request to cancel a reserved program for re-prioritizing all remaining reservation requests.

10. (Previously presented) The apparatus of claim 8 further comprising means responsive to a request to add an additional program to the reserved programs for re-prioritizing all reservation requests.

11. (Previously presented) The apparatus of claim 8 wherein the grouping means further comprises:

means for identifying reserved programs that overlap directly with each other or that indirectly overlap via another reserved program and

means for placing all such directly or indirectly overlapping programs in the same group.

12. (Previously presented) Apparatus for automatically scheduling without user intervention the recording of broadcast data programs that are sequentially and repetitively transmitted in groups over ones of multiple channels such that programs in different channels can overlap each other in time, comprising:

- structure for accepting reservation requests of one or more of the data broadcast programs,

- structure for grouping the reserved data broadcast programs into one or more groups in which each group contains programs that interfere with each other with respect to receiving in sequence, and

- structure for assigning a unique receiving priority to each group and to each program within a group such that all of the reserved repeating programs can be received in sequence according to the assigned priorities.

13. (Previously presented) A method of automatically scheduling without user intervention the recording of broadcast data programs that are repetitively transmitted in groups over ones of multiple channels such that programs in different channels can overlap each other in time, comprising the steps of

- accepting reservation requests of one or more of the data broadcast programs,

- grouping the reserved data broadcast programs into one or more groups in which each group contains programs that interfere with each other with respect to receiving in sequence, and

- assigning a unique receiving priority to each group and to each program within a group such that all of the reserved repeating programs can be received in sequence according to the assigned priorities.

14. (Previously presented) The method of claim 13 further comprising re-prioritizing all remaining reservation requests responsive to a request to cancel a reserved program.

15. (Previously presented) The method of claim 13 further comprising re-prioritizing all reservation requests responsive to a request to add an additional program to the reserved programs.

16. (Previously presented) The method of claim 13 wherein the step of grouping further comprises  
identifying reserved programs that overlap directly with each other or that indirectly overlap via another reserved program and  
placing all such directly or indirectly overlapping programs in the same group.

17. (Previously presented) A computer program product for storing a program to control a computer that when executed on the computer automatically schedules without user intervention the recording of broadcast data programs that are repetitively transmitted in groups over ones of multiple channels such that programs in different channels can overlap each other in time, the method comprising the steps of  
accepting reservation requests of one or more of the data broadcast programs,  
grouping the reserved data broadcast programs into one or more groups in which each group contains programs that interfere with each other with respect to receiving in sequence, and  
assigning a unique receiving priority to each group and to each program within a group such that all of the reserved repeating programs can be received in sequence according to the assigned priorities.

18. (Previously presented) The computer program product of claim 17 further comprising computer instructions for re-prioritizing all remaining reservation requests responsive to a request to cancel a reserved program.

19. (Previously presented) The computer program product of claim 17 further comprising computer instructions for re-prioritizing all reservation requests responsive to a request to add an additional program to the reserved programs.

20. (Previously presented) The computer program product of claim 17 wherein the step of grouping further comprises

computer instructions for identifying reserved programs that overlap directly with each other or that indirectly overlap via another reserved program and

computer instructions for placing all such directly or indirectly overlapping programs in the same group.

21. (Previously presented) A method for automatically scheduling the recording of broadcast programs in a scheduling process, comprising:

accepting reservation requests of one or more data broadcast programs that are sequentially and repetitively transmitted in groups over ones of multiple channels such that programs in different channels overlap each other in time;

grouping, without user intervention, the reserved data broadcast programs into one or more groups in which each group contains programs that temporally interfere with each other; and

assigning, without user intervention, a unique recording priority to each group and to each program within a group such that all of the reserved programs can be recorded in sequence according to the assigned priorities.

22. (Previously presented) The method of Claim 21, further comprising a step of overriding, by a user, one or more of the assigned recording priorities.